control programs would include: (a) expansion of Federal reformulated gasoline to the entire Ozone Transport Assessment Group (OTAG) region, and (b) application of high enhanced inspection and maintenance (I/M) in metropolitan statistical areas and consolidated metropolitan statistical areas with 2000 population greater than 500,000. We are also exploring options to reflect additional measures beyond expanded reformulated gasoline and enhanced I/M programs as part of this scenario.

• Pathway 3: This pathway combines pathways 1 and 2 and eases other controls so that emissions remain at post-CAAA levels.

[text deleted]

Ideally, EPA's alternative pathways analysis would hold air quality constant to ensure that benefits remain constant across different pathways of compliance. Given increased emissions reductions for one source category, the ideal analysis would calculate the degree to which CAAA restrictions on other source categories would be eased in order to achieve air quality consistent with primary post-CAAA air quality. Based on the difference between primary and alternative emissions reductions, EPA could then estimate changes in compliance costs for each source category.

Unfortunately, EPA will not be able to follow this methodology for its assessment of alternative pathways in the second prospective. Estimating the changes in emissions reductions necessary to hold air quality constant would require feedback capabilities too cumbersome for available air quality models. Given an increased emphasis on emissions reductions for one source category, EPA would need to run several iterations of an air quality model to calculate the degree to which emission reductions from other sources could be eased while maintaining constant overall air quality. Although EPA could program an air quality model to perform such an analysis, model run time would be prohibitively long.

Given the infeasibility of holding air quality constant, EPA plans to hold emissions constant in its analysis of alternative pathway scenarios (though some slight variation in emission reductions between scenarios may prevail given the non-continuousness of emission control options). For the pathways emphasizing tighter controls on utilities, the decline in emissions from utilities will equal the increase in emissions from other sources. Similarly, for the pathways targeting motor vehicle emissions reductions, the extra decline in motor vehicle emissions will equal the increase in emissions from other sources. EPA recognizes that air quality, and therefore benefits, might change if emissions are simply redistributed among source categories. However, given the computational limitations of air quality modeling, emissions is the best variable around which to anchor an alternative pathway analysis since it is only one step removed from air quality in the 812 analytic sequence.

The second prospective will also consider increased control scenarios under which the Clean Air Act is made even more stringent by varying degrees, starting in the year 2000. Under these scenarios, emissions from all major source categories will continue to decline after 2000, instead of leveling off. EPA is still in the process of precisely defining the increased control scenarios.